



Do you have a problem with:

- Soil crusting
- Cloddy soil
- Water stress (too wet or too dry) for crops
- Soil erosion
- Soil compaction
- Low yields

A crop rotation can help to manage your soil and fertility, reduce erosion, improve your soil's health, and increase nutrients available for crops.



Rotations need to include crops that provide good cover and root development to control erosion and improve soil health.

Benefits of Crop Rotations:

- Improve crop yields
- Improve the workability of the soil
- Reduce soil crusting
- Increase water available for plants
- Reduce erosion and sedimentation
- Recycle plant nutrients in the soil
- Provide better distribution of labor during the crop season by using different crops, planting dates, and harvest periods



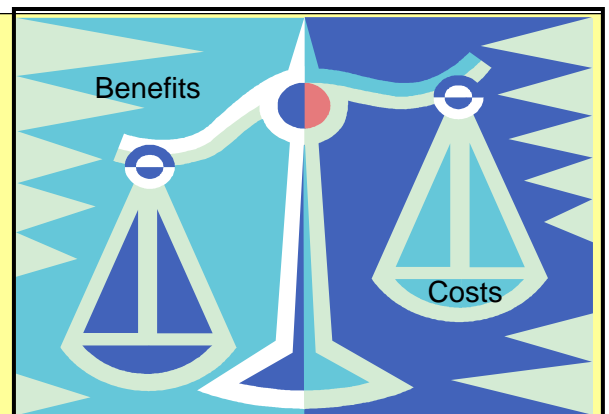
Rotations that include high residue crops build healthy soils and improve production.

How much does it cost?

Little to No Cost To Implement

Financial Benefits:

- Reduced fertilizer inputs.
- Reduced pesticide inputs



Rotations for Soil Fertility

Crop Rotation Planning Considerations:

- Identify soil erosion, nutrient, and soil health concerns.
- Soil test (every 1-3 years) for pH, organic matter, and nutrients. Use soil test recommendations to adjust pH and nutrient levels for optimum crop yields and quality.
- Determine nutrient (fertilizer, manure, or composts) needs.
- Choose the crops/varieties to meet the erosion, soil health, nutrient concerns, and other producer objectives.
- Evaluate and modify the crop sequence based on the identified concerns.
- Attend training needed for crop, soil, and pest scouting.
- Evaluate cover crop needs.
- Clean field equipment when moving from one field to another. Wash with water and/or physically remove the soil and plant residue from the equipment.

Practice Application:

- Using a map, lay out a rotation for the crops by year for the length of the rotation.
- Plan the rotation for the operation to establish a nearly equal acreage of each crop each year.

Corn Grain - Yr 1 Oats - Yr 2 Hay - Yr 3 Hay - Yr 4		Field 1 Crops 9.3
Oats - Yr 1 Hay - Yr 2 Hay - Yr 3 Corn Grain - Yr 4		Field 2 Crops 9.7
Hay - Yr 1 Hay - Yr 2 Corn Grain - Yr 3 Oats - Yr 4		Field 3 Crops 9.7
Farm HQ's 3.2	Hay - Yr 1 Corn Grain - Yr 2 Oats - Yr 3 Hay - Yr 4	Field 4 Crops 7.5

*Example 4 year Crop Rotation:
Corn – Oats – Hay – Hay*

Other Benefits:

- Reduces soil loss
- Reduces nutrient and pesticide contamination of streams and well water
- Improves crop emergence, growth, and health
- Reduces financial risk by using multiple crops
- Improves air quality

Crop Rotation Maintenance:

- Periodic soil testing (initially every 1-3 years, then later at 3-5 years)
- Crop and pest scouting
- Annually, evaluate cropping sequence for income needs and soil concerns
- Calibrate sprayers, planters, and fertilizer applicators to:
 - apply the recommended rates
 - establish uniform distributions
 - provide uniform seeding depths

Rotations for Soil Fertility



A Good Rotation Begins with Planning



Rotations Involving Hay or Cover Crops Improve Soil Health



Multiple Crops in a Rotation Break Weed, Insect, and Disease Cycles.



Crop Rotations are an essential component to raising crops organically.



Rotations are Planned to Produce Residue Cover for Erosion Control and Moisture Conservation.



Rotations with Hay or Cover Crops can Reduce Fertilizer and Pesticide Inputs.

SMALL SCALE SOLUTIONS FOR YOUR FARM IN INDIANA

Technical Help Is Available

Your local Natural Resources Conservation Service (NRCS) office has experienced conservationists that can help you plan a rotation to improve soil health and fertility. They can also help you develop a Conservation Plan to solve other concerns you have identified on your farm.

There is no charge for our assistance. Simply call your local office to set up an appointment and we will come to your farm. Requests for our assistance are numerous, but we will assist you as quickly as we can.

You may also be eligible to receive financial assistance through a state or federal program. Your NRCS office will explain any programs that are available so you can make the best decision for your operation. All NRCS programs and services are voluntary.



Helping People Help the Land

For More Information Contact the:

Natural Resources Conservation Service at the USDA Service Center for your county

On the web at <http://offices.sc.egov.usda.gov/locator/app>

Or

Located in the phone book under 'United States Government, United States Department of Agriculture, USDA Service Centers'

Or the

Local Soil & Water Conservation District

(Typically co-located in the local USDA Service Center)

Office hours: M-F, 8:00 am to 4:30 pm (closed on federal holidays)

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